

## AWS Specifications for Welding Consumables

### 1.0 INTRODUCTION:

American Society of Mechanical Engineers (ASME) set up a committee in 1911 for the purpose of formulating standard rules for the construction of steam boilers and other pressure vessels. This committee is now called the Boiler & Pressure Vessel Committee. This committee has established procedures to perform various activities in accordance with the requirements of the ASME Boiler & Pressure Vessel Codes.

### 2.0 AWS SPECIFICATIONS FOR WELDING CONSUMABLES:

Section II Part C of the ASME Boiler & Pressure Vessel Code deals with “Specifications for Welding Rods, Electrodes, and Filler metals”. These specifications are mentioned below.

Specification	Title
SFA-5.01	Filler Metal Procurement Guidelines.
SFA-5.1/SFA-5.1M	Carbon Steel Electrodes for shielded Metal Arc Welding.
SFA-5.2	Carbon and Low Alloy Steel Rods for Oxy-fuel Gas Welding.
SFA-5.3/SFA-5.3M	Aluminum and Aluminum Alloy Electrodes for shielded Metal Arc Welding.
SFA-5.4/SFA-5.4M	Stainless Steel Electrodes for Shielded Metal Arc Welding.
SFA-5.5/SFA-5.5M	Low-Alloy Steel Electrodes for Shielded Metal Arc Welding.
SFA-5.6	Covered Copper and Copper Alloy Arc Welding Electrodes.
SFA-5.7	Copper and Copper Alloy Bare Welding Rods and Electrodes.
SFA-5.8/SFA-5.8M	Filler Metals for Brazing and Braze Welding.
SFA-5.9/SFA-5.9M	Bare Stainless Steel Welding Electrodes and Rods.
SFA-5.10/SFA-5.10M	Bare Aluminum and Aluminum Alloy welding Electrodes and Rods.

## AWS Specifications for Welding Consumables

Specification	Title
SFA-5.11/SFA-5.11M	Nickel and Nickel Alloy Welding Electrodes for Shielded Metal Arc Welding.
SFA-5.12/SFA-5.12M	Tungsten and Tungsten-Alloy Electrodes for Arc Welding and Cutting.
SFA-5.13/SFA-5.13M	Surfacing Electrodes for Shielded Metal Arc Welding.
SFA-5.14/SFA-5.14M	Nickel and Nickel Alloy Bare Welding Electrodes and Rods.
SFA-5.15	Welding Electrodes and Rods for Cast iron.
SFA-5.16/SFA-5.16M	Titanium and Titanium-Alloy Welding Electrodes and Rods.
SFA-5.17/SFA-5.17M	Carbon Steel Electrodes and Fluxes for Submerged Arc Welding.
SFA-5.18/SFA-5.18M	Carbon Steel Electrodes and Rods for Gas Shielded Arc Welding.
SFA-5.20/SFA-5.20M	Carbon Steel Electrodes for Flux Cored Arc Welding.
SFA-5.21	Bare Electrodes and Rods for surfacing.
SFA-5.22	Stainless Steel Electrodes for Flux Cored Arc Welding and Stainless Steel Flux Cored Rods for Gas Tungsten Arc Welding.
SFA-5.23/SFA-5.23M	Low-Alloy Steel Electrodes and Fluxes for Submerged Arc Welding.
SFA-5.24/SFA-5.24M	Zirconium and Zirconium Alloy Welding electrodes and Rods.
SFA-5.25/SFA-5.25M	Carbon and Low Alloy steel Electrodes and Fluxes for Electro slag Welding.
SFA-5.26/SFA-5.26M	Carbon and Low Alloy steel Electrodes for Electro slag Welding.
SFA-5.28/SFA-5.28M	Low-Alloy Steel Electrodes and Rods for Gas Shielded Arc Welding.
SFA-5.29/SFA-5.29M	Low-Alloy Steel Electrodes for Flux Cored Arc Welding.
SFA-5.30	Consumable Inserts.
SFA-5.31	Fluxes for Brazing and Braze Welding.
SFA-5.32/SFA-5.32M	Welding Shielding Gases.

